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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,933	01/15/2004	Thomas W. Lanni	306168 81088	6526

7590 03/12/2007  
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EXAMINER

CAVALLARI, DANIEL J

ART UNIT	PAPER NUMBER
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2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/758,933	LANNI, THOMAS W.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Daniel J. Cavallari	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-7,9,11,13,15-17,19,21-23,25-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,9,11,13,15-17,19,21-23,25-27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/1/06 & 12/29/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

The examiner acknowledges a submission of the amendment filed on 12/1/2006. The amendments to claims 1, 3, 5, 6, 9, 11, 13, 15, 16, 19, 21, 22, 23, 25, 26, 29, and cancellation of claims 2, 4, 8, 10, 12, 14, 18, 20, 24, 28, & 30-40 are accepted.

### ***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 12/1/2006 & 12/29/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3, 5-7, 9, 11, 13, 15-17, 19, 21-23, 25-27, & 29 have been considered but are moot in view of the new ground(s) of rejection.

The previously made 112 rejections and objection to the specification have been withdrawn in view of the amendments.

### ***Claim Objections***

Claims 21-23, 25-27, & 29 are objected to because of the following informalities:

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The examiner notes that this objection was present in the previous office action and that the applicant amended most claims to overcome the rejection however failed to correct the problem in claims listed above and therefore the objection is being restated.

The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

The examiner notes that the applicant begins using reference characters appropriately (ie. "Vout" "Vref" "Vdata") placing them in parentheses but then precedes to use the reference characters in the claims improperly. Any characters or text in parentheses are not considered actual limitations of the claim therefore the reference characters should not be solely used in the claim rather the complete name of the component should be used (ie. "Vout" = regulated DC voltage, "Vref" = reference voltage, "Vdata" = data signal).

Appropriate action is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22, 23, 25-27, & 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Atkinson et al. (US 2005/0127758).

Atkinson et al. (hereinafter referred to as Atkinson) teaches:

In regard to Claim 21

A power supply comprising:

- An adapter device (100) to receive DC power from an external DC power source (DC IN) and output a regulated DC voltage (See Figure 1 & Paragraphs 17).
- The adapter device including DC source determination circuitry (115) to receive the DC power from the DC power source (127) and compare a magnitude of a voltage of the DC power with a reference magnitude of a reference voltage (117) with comparator (115) (See Figure 1 & Paragraph 10) in order to determine what type of external DC power source is supplying DC power (See Paragraphs 10-13).

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- Wherein when the magnitude of the voltage of the DC power is greater than a reference magnitude, a data signal having a first value indicative of the external DC power source being an airplane power source is output (via line 131) and when the magnitude of the voltage of the DC power is less than the reference magnitude, the data signal has a second value indicative of the external DC power source being an automobile power source is output (See Figure 1 & Paragraphs 10-13).
- An electronic device (108) having control circuitry to receive the data signal (See Figure 1).

In regard to Claim 22

- When the data signal has the first value, the electronic device operates in a first mode (battery not charging) and when the data signal has the second value, the battery charging circuitry (110) is enabled (See Figure 1 & Paragraph 17).

In regard to Claims 23

- The magnitude of the DC power being in a range between about 11.0 Volts and about 15.5 Volts (See Figure 2 & Paragraphs 11-13) [The examiner notes that Atkinson teaches a range of 14.5-15.5V].

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In regard to Claim 25

- The magnitude of the DC power in a range between about 14.5 Volts and about 15.5 Volts (See Figure 2 & Paragraphs 11-13) [The examiner notes that Atkinson teaches a range of 14.5-15.5V].

In regard to Claim 26

- The adapter further including an AC to DC adapter (122) to receive power and convert the AC input power to an additional DC power signal (See Figure 1 & Paragraph 8).

In regard to Claims 27

- Wherein the electronic device is a notebook computer (See Paragraph 8).

In regard to Claim 29

- The data signal being selected from the group consisting of a transmission of a discrete bit, a transmission of a data signal having multiple bits, an analog signal and an analog voltage (read on by the output of the comparator).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-7, 9, 11, 13, 15-17, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doss et al. (US 6,751,109) in view of Atkinson et al. (US 2005/0127758).

In regard to Claims 1 & 9

Doss et al. (hereinafter referred to as Doss) teaches:

An adapter device comprising:

- A DC/DC adapter, external to an electronic device (ie. computer not shown, See Column 2, Lines 35-50), having a power supply (ie. battery 36, See Figure 1) to receive DC power from an external DC power source (16) and output a regulated DC voltage (DC OUT) to the electronic device (ie. computer, not shown) (See Figure 1).

Doss fails to teach DC source determination circuitry. Atkinson et al. (Hereinafter referred to as Atkinson) teaches DC source determination circuitry which:

- Source determination circuitry (115) to receive the DC power from the DC power source (127) and compare a magnitude of a voltage of the DC power with a reference magnitude of a reference voltage (117) with comparator (115) (See Figure 1 & Paragraph 10) in order to determine what type of external DC power source is supplying DC power (See Paragraphs 10-13).
- Wherein when the magnitude of the voltage of the DC power is greater than a reference magnitude, a data signal having a first value indicative of the external



DC power source being an airplane power source is output (via line 131) and when the magnitude of the voltage of the DC power is less than the reference magnitude, the data signal has a second value indicative of the external DC power source being an automobile power source is output (See Figure 1 & Paragraphs 10-13).

- The data signal being selected from the group consisting of a transmission of a discrete bit, a transmission of a data signal having multiple bits, an analog signal and an analog voltage (read on by the output of the comparator).

[The examiner further notes that Table 1 shows three "regions" 150, 152, & 154 in which region 154 represents the source being from a building (ie. AC), region 152 is indicative of airplane power, and region 154 is indicative of a vehicle battery].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the DC source determination circuitry taught by Atkinson with the adapter taught by Doss in which the DC source determination circuitry was connected at the input of Doss to determine the source of DC voltage and control the charging of the battery (36, See Doss Figure 1). The motivation would have been to prevent from exceeding the power limit from the source as when operating from an airplane source (See Atkinson, Paragraph 8).

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Doss further teaches:

In regard to Claim 3 & 13

- The magnitude of the DC power in a range between about 11.0 Volts and about 14.1 Volts [The examiner notes that Doss teaches a DC input ranging from 5 to 15 Volts (See Column 2, Lines 51-67).

In regard to Claim 5 & 15

- The magnitude of the DC power in a range between about 14.5 Volts and about 15.5 Volts [The examiner notes that Doss teaches a DC input ranging from 5 to 15 Volts (See Column 2, Lines 51-67).

In regard to Claim 6 & 16

- The adapter further including an AC/DC adapter (12, See Figure 1), to receive AC input power and convert the AC input power to an additional DC power signal (in which the additional DC power signal is supplied to the circuit 34, See Figure 1).

In regard to Claim 7 & 17

- Wherein the electronic device is a notebook computer (See Column 2, Lines 35-50).

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In regard to Claims 11 & 19

Doss teaches:

- Receiving DC power from a DC power source (16, See Figure 1), at an adapter, and output a regulated DC voltage (20) from the adapter to an electronic device (not shown) (See Figure 1).

Doss fails to teach DC source determination circuitry. Atkinson et al. (Hereinafter referred to as Atkinson) teaches DC source determination circuitry which:

- Comparing a magnitude of a voltage of the DC power with a reference magnitude of a reference voltage (117) with comparator (115) (See Figure 1 & Paragraph 10) in order to determine what type of external DC power source is supplying DC power (See Paragraphs 10-13).
- Outputting a data signal having a first value indicative of the external DC power source being an airplane power source is output (via line 131) and when the magnitude of the voltage of the DC power is less than the reference magnitude, the data signal has a second value indicative of the external DC power source being an automobile power source is output (See Figure 1 & Paragraphs 10-13).
- The data signal being selected from the group consisting of a transmission of a discrete bit, a transmission of a data signal having multiple bits, an analog signal and an analog voltage (read on by the output of the comparator).

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[The examiner further notes that Table 1 shows three "regions" 150, 152, & 154 in which region 154 represents the source being from a building (ie. AC), region 152 is indicative of airplane power, and region 154 is indicative of a vehicle battery].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the DC source determination circuitry taught by Atkinson with the adapter taught by Doss in which the DC source determination circuitry was connected at the input of Doss to determine the source of DC voltage and control the charging of the battery (36, See Doss Figure 1). The motivation would have been to prevent from exceeding the power limit from the source as when operating from an airplane source (See Atkinson, Paragraph 8).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Cavallari

February 21, 2007



CHAU N. NGUYEN  
PRIMARY EXAMINER